

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sin J. Lee Examiner #: 76060 Date: 2-9-05
 Art Unit: 1752 Phone Number 302-1333 Serial Number: 10/697,875
 Mail Box and Bldg/Room Location: 9D60 Results Format Preferred (circle): PAPER DISK E-MAIL
 (Rem.)

If more than one search is submitted, please prioritize searches in order of need.

 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Plz. see B.6.

Inventors (please provide full names): _____

SCIENTIFIC REFERENCE BR

Sci. & Tech. Info. Cntr

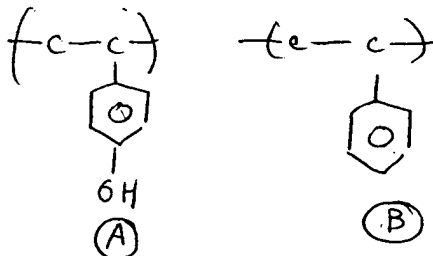
Earliest Priority Filing Date: _____

FEB 09

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued parent numbers) along with the appropriate serial number.

Pat. & T.M. Office

Plz. search for the following having repeat units (A) & (B)
 a polymer (used in a colored
 photosensitive
 resin composition)



Pat. & T.M. Office
 Sci. & Tech. Info. Cntr
 SCIENTIFIC REFERENCE BR

where (A) : (B) = 1 : 0.7 - 1 : 20

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>EL</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Link _____
Date Completed: <u>2-10-05</u>	Litigation _____	Lexis/Nexis _____
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CONFIRMATION NO. 8992

Bib Data Sheet

SERIAL NUMBER 10/697,875	FILING DATE 10/31/2003 RULE	CLASS 430	GROUP ART UNIT 1752	ATTORNEY DOCKET NO. 2003_1587A
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APPLICANTS

Kazuhiro Machiguchi, Osaka, JAPAN;
 Masanori Shinada, Osaka, JAPAN;
 Yuuji Ueda, Osaka, JAPAN; Hiroki Endo, Tokyo, JAPAN;
 Taichi Natori, Tokyo, JAPAN;

** CONTINUING DATA *****

** FOREIGN APPLICATIONS *****
 JAPAN 2002-319505 11/01/2002

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
 ** 02/02/2004

Foreign Priority claimed 35 USC 119 (a-d) conditions met	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance	STATE OR COUNTRY JAPAN	SHEETS DRAWING 2	TOTAL CLAIMS 12	INDEPENDENT CLAIMS 1
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Verified and Acknowledged
 Examiner's Signature _____ Initials _____

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 000513
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 SUITE 800
 WASHINGTON , DC
 20006-1021

TITLE
 Colored photosensitive resin composition and color filter comprising the same

FILING FEE	FEES: Authority has been given in Paper	<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of
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=> file reg

FILE 'REGISTRY' ENTERED AT 18:35:47 ON 10 FEB 2005
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=> display history full 11-

FILE 'REGISTRY' ENTERED AT 17:17:02 ON 10 FEB 2005

E STYRENE/CN
L1 1 SEA STYRENE/CN
L2 69223 SEA 100-42-5/CRN
E 4-HYDROXYSTYRENE/CN
L3 1 SEA 4-HYDROXYSTYRENE/CN
L4 1850 SEA 2628-17-3/CRN
L5 181 SEA L2 AND L4
L6 4 SEA L5 AND 2/NC

FILE 'HCA' ENTERED AT 17:18:39 ON 10 FEB 2005

L7 335 SEA L6
L8 10930 SEA (COLOR? OR COLOUR?) (2A) FILT?
L9 91809 SEA ((PHOTO OR LIGHT OR PHOTOLY?) (2A) (RX# OR RXN# OR
REACT? OR SENSITI? OR POLYM? OR CURE# OR CURING# OR
CURAB? OR CROSSLINK? OR CROSS(W) LINK? OR CAT# OR
CATALY?)) /BI, AB
L10 102192 SEA ((ULTRAVIOLET? OR ULTRA(W) VIOLET? OR UV# OR SUV OR
LUV OR RADIA? OR IRRADIA? OR EMANAT? OR EMIT? OR EMISS?
OR LASER?) (2A) (RX# OR RXN# OR REACT? OR REACT? OR POLYM?
OR CURE# OR CURING# OR CURAB? OR CAT# OR CATALY? OR
CROSS(W) LINK? OR CROSSLINK?)) /BI, AB
L11 164410 SEA (PHOTORX## OR PHOTOREACT? OR PHOTOSENS? OR PHOTOPOLYM
? OR PHOTOCUR? OR PHOTOHARDEN? OR PHOTOCROSS? OR
PHOTOCAT?) /BI, AB
L12 158219 SEA RESIST OR RESISTS OR PHOTORESIST? OR MASK? OR
PHOTOMASK?
L13 10 SEA L7 AND L8
L14 164 SEA L7 AND L12
L15 70 SEA L7 AND (L9 OR L10 OR L11)
L16 54 SEA L14 AND L15
L17 1 SEA L13 AND L16

FILE 'HCAPLUS' ENTERED AT 18:00:27 ON 10 FEB 2005

L18 97 SEA MACHIGUCHI ?/AU
L19 596 SEA SHINADA ?/AU
L20 36419 SEA UEDA ?/AU

L21 2081 SEA NATORI ?/AU
L22 0 SEA L18 AND L19 AND L20 AND L21
L23 0 SEA L18 AND L19
L24 11 SEA L18 AND L20
L25 4 SEA L18 AND L21
L26 12 SEA L19 AND L20
L27 0 SEA L19 AND L21
L28 5 SEA L20 AND L21
L29 24 SEA (L23 OR L24 OR L25 OR L26 OR L27 OR L28)
L30 1 SEA L29 AND L12
L31 11 SEA L29 AND ((L8 OR L9 OR L10 OR L11 OR L12))
SEL L31 1-11 RN

FILE 'REGISTRY' ENTERED AT 18:05:56 ON 10 FEB 2005

L32 79 SEA (68-12-2/BI OR 22374-89-6/BI OR 107-45-9/BI OR
L33 6 SEA L32 AND PMS/CI
D L33 1-6 RN IN
SEL L33 3,6 RN
L34 2 SEA (24979-74-6/BI OR 72317-19-2/BI)
L35 1 SEA L34 AND L6

FILE 'HCA' ENTERED AT 18:08:01 ON 10 FEB 2005

L36 439 SEA L34
L37 12 SEA L36 AND L8
L38 222 SEA L36 AND L12
L39 99 SEA L36 AND (L9 OR L10 OR L11)
L40 11 SEA L37 AND (L38 OR L39)
L41 80 SEA L38 AND L39

FILE 'REGISTRY' ENTERED AT 18:09:10 ON 10 FEB 2005

E 2-HYDROXYSTYRENE/CN
L42 1 SEA 2-HYDROXYSTYRENE/CN
D RN
L43 35 SEA 695-84-1/CRN
E 3-HYDROXYSTYRENE/CN
L44 1 SEA 3-HYDROXYSTYRENE/CN
D RN
L45 129 SEA 620-18-8/CRN
L46 10 SEA (L43 OR L45) AND L2
L47 3 SEA L46 AND 2/NC

FILE 'HCA' ENTERED AT 18:10:35 ON 10 FEB 2005

L48 55 SEA L47
L49 0 SEA L48 AND L8
L50 20 SEA L48 AND L12
L51 3 SEA L48 AND (L9 OR L10 OR L11)
L52 3 SEA L50 AND L51
L53 462071 SEA FILTER?

L54 5 SEA L14 AND L53
L55 5 SEA L15 AND L53
L56 1 SEA L16 AND L53
L57 6 SEA L38 AND L53
L58 7 SEA L39 AND L53
L59 0 SEA L50 AND L53
L60 0 SEA L51 AND L53
L61 11 SEA (L54 OR L55 OR L56 OR L57 OR L58 OR L59 OR L60)
L62 15 SEA L13 OR L17 OR L37 OR L40 OR L52 OR L61
L63 51 SEA L16 NOT L62
L64 50 SEA L63 AND (1900-2002/PY OR 1900-2002/PRY)
L65 15 SEA L62 AND (1900-2002/PY OR 1900-2002/PRY)

=> file hca

FILE 'HCA' ENTERED AT 18:36:03 ON 10 FEB 2005

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=> d l65 1-15 cbib abs hitstr hitind

L65 ANSWER 1 OF 15 HCA COPYRIGHT 2005 ACS on STN

141:44989 Colored **light-sensitive** resin composition

for **color filters** in CCD camera. Machiguchi,
Kazuhiro; Shinata, Masanori; Ueda, Yuji; Endo, Hirotake; Natori,
Taichi (Sumitomo Chemical Co., Ltd., Japan; Sony Corp.). Jpn. Kokai
Tokkyo Koho JP 2004170953 A2 20040617, 15 pp. (Japanese). CODEN:
JKXXAF. APPLICATION: JP 2003-370254 20031030. PRIORITY: JP
2002-319505 20021101.

AB The title compn. contains an alkali-solubilizable copolymer, wherein
the copolymer contains a repeating unit derived from hydroxystyrene
and repeating unit derived from styrene with 1:0.7-1:20 ratio and
has 6,000-15,000 wt. av. mol. wt. calcd. as polystyrene. The
color filter shows high **color d.** with
.ltoreq.5 .mu.m thickness while providing good **color
filter** characteristics.

IC ICM G03F007-004

ICS G02B005-20

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)

Section cross-reference(s): 35

ST colored light resin compn **color filter** CCD
camera resin

IT CCD cameras

Light-sensitive materials**Optical filters**

(colored light-sensitive resin

compn. for color filters for CCD camera)

IT CCD cameras

Light-sensitive materials**Optical filters**

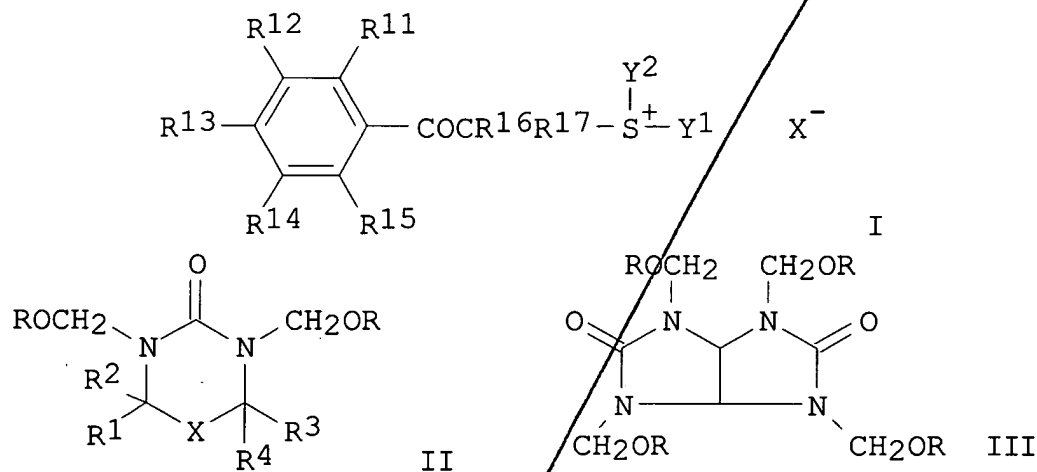
(colored light-sensitive resin

compn. for color filters for CCD camera)

L65 ANSWER 2 OF 15 HCA COPYRIGHT 2005 ACS on STN

140:347504 Negative-working **resist** compositions containing acid generator and crosslinker which reacts in the presence of an acid. Takahashi, Omote; Yasunami, Shoichiro; Shirakawa, Hiroshi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2004117876 A2 20040415, 61 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2002-281425 20020926.

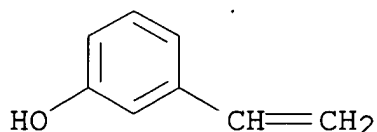
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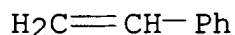
AB The disclosed neg.-working **resist** compn. contains an alkali-sol. polymer, a crosslinking agent which crosslinks the polymer in the presence of an acid, and a photo-acid generator. The photoacid generator is a compd. of the formula I (Y1, Y2 = alkyl, alkenyl; alkyl group may contain OH or ether bond, Y1 and Y2 may combine to form a ring; R11-15 = H, NO2, halo, alkyl, alkoxy, alkyloxycarbonyl, aryl, acylamino; adjacent two of R11-15 may form a ring; R16, R17 = H, CN, alkyl, aryl; one of R11-15 may combined with one of Y1, Y2, R16, and R17 to form a ring). The crosslinking agent is selected from compd of formula II, III, (R = H, alkyl, acyl; R1-4 = H, OH, alkyl, alkoxy; X = bond, CH2, O) and (ROCH2)2NCON(CH2OR)2

(R is same as in II and III). The **resist** has superior image resoln. and high sensitivity toward x-ray and electron beam, and useful for lithog. fabrication of large-scale integrated circuits.

IT **24979-73-5**, 3-Hydroxystyrene-styrene copolymer
(photoacid generator type neg. working radiation **resist**
contg.)
RN 24979-73-5 HCA
CN Phenol, 3-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)
CM 1
CRN 620-18-8
CMF C8 H8 O



CM 2
CRN 100-42-5
CMF C8 H8



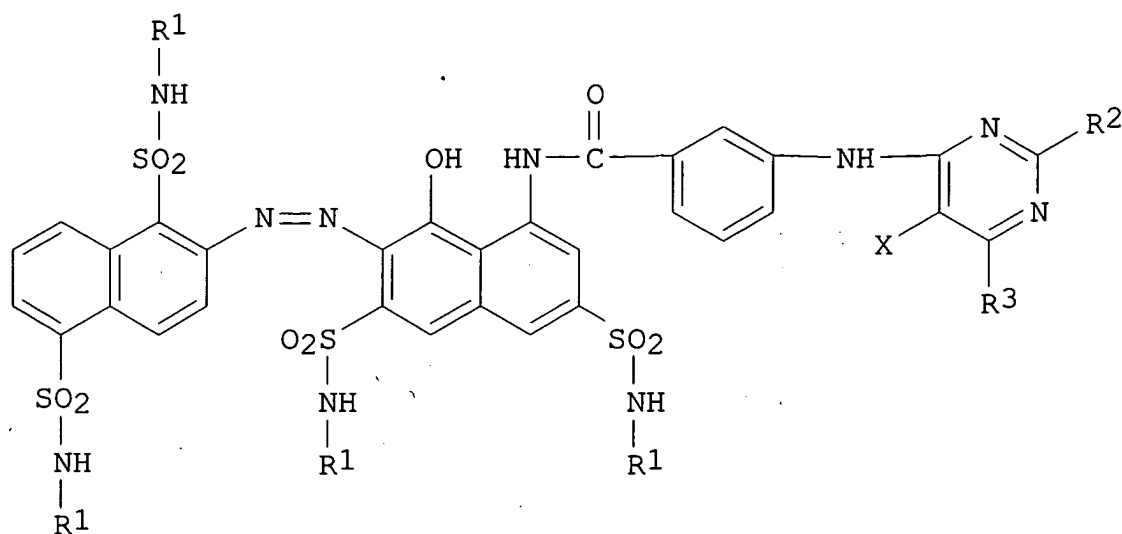
IC ICM G03F007-038
ICS H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)
ST neg radiation **resist** acid generator crosslinker;
alkoxymethylated melamine **crosslinker radiation**
resist
IT Crosslinking agents
(alkoxymethylated meramines as crosslinkers for acid generation
type radiation **resists**)
IT Electron beam **resists**
X-ray **resists**
(crosslinking agents and acid generators for neg.-working)
IT 120976-85-4 454471-15-9 460754-20-5 470482-89-4 474510-73-1
506445-09-6 506445-10-9 506445-12-1 506445-23-4 506445-26-7
506445-28-9 506445-30-3 591244-02-9
(acid generator; photoacid generator type neg. working radiation

resist contg. alcoxymethylated melamine crosslinker and)
IT 506445-32-5
(acid generator; photoacid generator type neg. working radiation
resist contg. alcoxymethylated meramine crosslinker and)
IT 679837-88-8
(acid generator; photoacid generator type neg. working radiation
resist contg. alcoxymethylated melamine crosslinker and)
IT 3089-11-0 5395-50-6, Tetrakis(hydroxymethyl)acetyleneurea
15968-37-3 17464-88-9 508220-69-7 625121-00-8
(crosslinking agent; photoacid generator type neg. working
radiation **resist** contg.)
IT 24979-70-2, Poly(4-hydroxystyrene) **24979-73-5**,
3-Hydroxystyrene-styrene copolymer 24979-74-6,
4-Hydroxystyrene-styrene copolymer 149614-53-9,
3-Hydroxystyrene-4-hydroxystyrene copolymer 171429-59-7,
4-Hydroxystyrene-4-vinylphenyl acetate copolymer 185405-14-5,
4-Hydroxystyrene-3,4-methylenedioxy styrene copolymer 204065-67-8,
4-Hydroxystyrene-4-methylstyrene copolymer 219838-71-8,
Poly(3,5-dihydroxystyrene) 321164-59-4, 4-Hydroxystyrene-1-
vinyl naphthalene copolymer 345212-30-8, 3-Hydroxystyrene-3,4,5-
trimethoxystyrene copolymer 345212-56-8, 4-Hydroxystyrene-2-
vinyl naphthalene copolymer 345212-59-1, 4-Hydroxystyrene-(5-vinyl-
1-naphthol) copolymer 349619-68-7, 3-Hydroxystyrene-4-
methoxystyrene copolymer 354589-43-8 396098-38-7,
3-Hydroxystyrene-1-vinyl naphthalene copolymer 575464-71-0,
4-Hydroxystyrene-styrene-4-vinylphenyl acetate copolymer
(photoacid generator type neg. working radiation **resist**
contg.)

L65 ANSWER 3 OF 15 HCA COPYRIGHT 2005 ACS on STN

139:108781 Sulfoneamide compounds, their preparation, and their color
photopolymer compositions for magenta **color**
filter arrays. Ueda, Yuji; Machiguchi, Kazuhiro; Uchida,
Yoshinori; Endo, Hiroki (Sumitomo Chemical Co., Ltd., Japan; Sony
Corp.). Jpn. Kokai Tokkyo Koho JP 2003201413 A2 20030718, 11 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 2002-3181 20020110.

GI



I

AB The sulfoneamide compds., represented by a general formula I (R1 = alkyl, cyclohexylalkyl, alkoxy, alkoxyalkyl, aryl, aralkyl; R2, R3 = halogen, OH; X = halogen), is prepd. by reacting sulfone halide compds. bearing SO₂Y on the naphthalene rings with primary amines R₁NH₂ (R1 = same as in I) to replace the SO₂Y to SO₂NHR₁. The sulfone halide compds. are prepd. by reacting sulfonyl compds. whose free acids bear SO₃H with halogenated thionyl compds. SO₂Y (Y = same as above) in the presence of N,N-dialkylformamides to replace the SO₃H to SO₂NHR₁. The color **photopolymer** compns. contg. I at high concn. are patterned to give magenta **color filter** layers showing good spectral properties.

IC ICM C09B043-32

ICS C07D239-42; C09B029-28; G02B005-20; G02B005-22

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 25, 41

ST sulfoneamide compd prepn **color filter** array;
photopolymer compn sulfoneamide magenta **color filter**

IT Phenolic resins, preparation
(novolak; prepn. of sulfoneamide compds. and their color **photopolymer** compns. for magenta **color filter** arrays)

IT Optical **filters**
(prepn. of sulfoneamide compds. and their color **photopolymer** compns. for magenta **color filter** arrays)

- IT 73817-38-6, Sandolan Milling Red K 4BL
(C.I. Acid Red 147, Sandolan Milling Red K 4BL; prepn. of sulfoneamide compds. and their color **photopolymer** compns. for magenta **color filter** arrays)
- IT 108-78-1, Melamine, reactions
(hardener; prepn. of sulfoneamide compds. and their color **photopolymer** compns. for magenta **color filter** arrays)
- IT 26505-28-2D, o-naphthoquinonediazide-5-sulfonate derivs.
561054-95-3
(**photosensitizer**; prepn. of sulfoneamide compds. and their color **photopolymer** compns. for magenta **color filter** arrays)
- IT 561054-92-0P
(prepn. of sulfoneamide compds. and their color **photopolymer** compns. for magenta **color filter** arrays)
- IT 561054-93-1P 561054-94-2P
(prepn. of sulfoneamide compds. and their color **photopolymer** compns. for magenta **color filter** arrays)
- IT 107-45-9, 1,1,3,3-Tetramethylbutylamine 22374-89-6,
3-Amino-1-phenylbutane 561063-62-5
(prepn. of sulfoneamide compds. and their color **photopolymer** compns. for magenta **color filter** arrays)
- IT 68-12-2, N,N-Dimethylformamide, reactions
(prepn. of sulfoneamide compds. and their color **photopolymer** compns. for magenta **color filter** arrays)
- IT 68-12-2, N,N-Dimethylformamide, reactions
(prepn. of sulfoneamide compds. and their color **photopolymer** compns. for magenta **color filter** arrays)
- L65 ANSWER 4 OF 15 HCA COPYRIGHT 2005 ACS on STN
136:135917 Fabrication of **color filter** with spacer
for liquid crystal display. Keitoku, Shiho; Kadono, Tomonobu (Dai Nippon Printing Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002031708 A2 **20020131**, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-213764 20000714.
- AB Title process comprises (A) formation of a patterned color top of a substrate (e.g., glass), (B) coating of a trans compn. contg. (I) alkali-insol. silicone (e.g., prepd methacrylate, acrylates, and Si oligomers) and (II) **photosensitive** resin incompatible to I (e.g., tert-butoxycarbonyl substituted phenolic hydroxy polymer) to form a bilayer structure (I on the bc

top), (C) exposure of I via a **photomask** and development with alkali to form spacing columns, and (D) heat treatment to give a **color filter** for liq. crystal display.

IT 72317-19-2P, Hydroxystyrene-styrene copolymer
(as neg. **photoresist** in **color filter**
fabrication)

RN . 72317-19-2 HCA

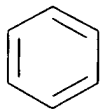
CN Phenol, ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 31257-96-2

CMF C8 H8 O

CCI IDS



D1-OH

D1-CH=CH₂

CM 2

CRN 100-42-5

CMF C8 H8

H₂C=CH-Ph

IC ICM G02B005-20

ICS C08L033-04; C08L101-02; G02F001-1335; G02F001-1339;
G03F007-038; G03F007-039; G03F007-075; G03F007-11; G03F007-40

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 73, 74

ST silicone **photoresist** spacer **color filter**
fabrication liq crystal display

IT Polysiloxanes, uses

(acrylic; for fabrication of **color filter** in
liq. crystal display)

IT Phenolic resins, uses

- (epoxy, novolak; for fabrication of **color filter** in liq. crystal display)
- IT Liquid crystal displays
(fabrication of **color filter** with spacing column for)
- IT Negative **photoresists**
Positive **photoresists**
(for fabrication of **color filter** in liq. crystal display)
- IT Phase separation
(for fabrication of **color filter** with spacing column in liq. crystal display)
- IT Epoxy resins, uses
(phenolic, novolak; for fabrication of **color filter** in liq. crystal display)
- IT Acrylic polymers, uses
(polysiloxane-; for fabrication of **color filter** in liq. crystal display)
- IT Optical **filters**
(with spacing column fabricated for liq. crystal display)
- IT 71868-10-5, Irgacure 907 85342-62-7, NAI 105
(as modifier for fabrication of **color filter** in liq. crystal display)
- IT 72317-19-2P, Hydroxystyrene-styrene copolymer
(as neg. **photoresist** in **color filter** fabrication)
- IT 100-42-5D, Styrene, polymers, tert-butoxycarbonyl substituted
(contg. phenolic hydroxyl group as pos. **photoresist** in **color filter** fabrication)
- IT 80-62-6DP, Methyl methacrylate, polymers with acrylates and Si oligomers 4074-88-8DP, Diethylene glycol diacrylate, polymers with acrylates and Si oligomers
(for fabrication of **color filter** in liq. crystal display)
- L65 ANSWER 5 OF 15 HCA COPYRIGHT 2005 ACS on STN
130:345146 Manufacture of **color filter** using positive-working **photosensitive** colored composition.
Suzuki, Nobuo (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11119017 A2 19990430 Heisei, 62 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1997-282267 19971015.
- AB **Color filter** is manufd. by coating a transparent substrate with title compn. contg. (1) a resin insol. in water and sol. in an alk. aq. soln., (2) a compd. generating acid upon active ray or radiation irrād., (3) a compd. of mol. wt. .ltoreq.3000 having a group that is decompd. by acid to increase soly. in an alk. developing soln., and (4) a colorant, light exposure, heating, developing, adding a **crosslinking agent**, **light**

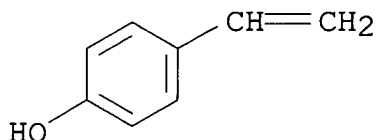
exposure, and heating. Alternatively, the compn. contains (1) a resin having a group that is decompd. by acid to increase soly. in an alk. developing soln., (2) a compd. generating acid by active ray or radiation irradiation, (3) an org. basic compd., and (4) a colorant. The **filter** is useful for liq. crystal displays and solid-state image pickup devices and shows heat and chem. resistance, high sensitivity, and good pattern profile and colorant dispersibility.

IT 24979-74-6, 4-Hydroxystyrene-styrene copolymer
 (alkali-sol. resin; **color filter** using
 pos.-working **photosensitive** colored resin compn.)
 RN 24979-74-6 HCA
 CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
 NAME)

CM 1

CRN 2628-17-3

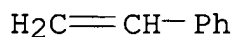
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



IC ICM G02B005-20
 ICS C09D007-12; C09D201-00; G03F007-004; G03F007-40
 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and
 Other Reprographic Processes)
 ST **color filter** pos working **photosensitive**
 resin; acid decomposable dissoln inhibitor **color**
filter; liq crystal display **color filter**
 ; image pickup device **color filter**
 IT Liquid crystal displays
 Optical **filters**
 Optical imaging devices
 (**color filter** using pos.-working
photosensitive colored resin compn.)

- IT Photoimaging materials
(color; color filter using
pos.-working **photosensitive** colored resin compn.)
- IT Aminoplasts
(crosslinking agent; color filter using
pos.-working **photosensitive** colored resin compn.)
- IT 56530-39-3 66003-78-9, Triphenylsulfonium
trifluoromethanesulfonate 124737-97-9
(acid generator; color filter using
pos.-working **photosensitive** colored resin compn.)
- IT 142952-62-3 180337-31-9 196709-91-8
(acid-decomposable resin; color filter using
pos.-working **photosensitive** colored resin compn.)
- IT 24979-74-6, 4-Hydroxystyrene-styrene copolymer
(alkali-sol. resin; color filter using
pos.-working **photosensitive** colored resin compn.)
- IT 101-80-4, 4,4'-Diaminodiphenyl ether 484-47-9,
2,4,5-Triphenylimidazole 1122-58-3, 4-Dimethylaminopyridine
(base; color filter using pos.-working
photosensitive colored resin compn.)
- IT 9003-08-1, Formaldehyde-melamine copolymer
(crosslinking agent; color filter using
pos.-working **photosensitive** colored resin compn.)
- IT 153698-54-5 153698-63-6 186493-32-3
(dissoln. inhibitor; color filter using
pos.-working **photosensitive** colored resin compn.)
- IT 147-14-8, C.I.Pigment Blue 15:6 4051-63-2, C.I.Pigment Red 177
14302-13-7, C.I.Pigment Green 36 36888-99-0, C.I.Pigment Yellow
139
(pigment; color filter using pos.-working
photosensitive colored resin compn.)

L65 ANSWER 6 OF 15 HCA COPYRIGHT 2005 ACS on STN

130:304048 Positively-working **photosensitive** colored
composition and color filter using same.

Suzuki, Nobuo (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo
Koho JP 11095435 A2 19990409 Heisei, 62 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1997-252177 19970917.

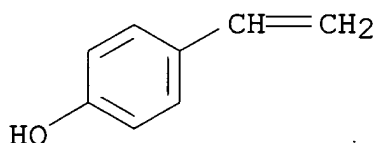
AB The title compn. contains (a) a resin insol. in water and sol. in
aq. alk. solns., (b) a compd. generating acid under active ray or
radiation irradiation, (c) a low-mol.-wt. acid-decomposable
dissoln.-inhibiting compd. with mol. wt. ≤ 3000 which has
acid-decomposable groups whose soly. in alk. developing solns. is
increased by the action of acid, and (d) a colorant. The compn. may
contain (a) a resin having groups which are decompd. by the action
of acid to increase the soly. in alk. developing solns., (b) a
compd. generating acid under active ray or radiation irradiation, (c) an
org. basic compd., and (d) a colorant. A color

filter using the compn. is also claimed. The compn. shows high **photosensitivity** and provides high quality patterns with good profile.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer
(pos. working **photoresist** material contg. alkali-sol. resin or acid-decomposable resin for manuf. of **color filter**)
RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

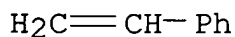
CM 1

CRN 2628-17-3
CMF C8 H8 O



CM 2

CRN 100-42-5
CMF C8 H8



IC ICM G03F007-039
ICS C08L101-00; C09D201-00; G02B005-20; G03F007-004
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST pos. working **photosensitive** compn **color filter**; acid decompn inhibitor pos working **photoresist**; alkali soly acid decomposable compn
IT Optical **filters**
Positive **photoresists**
(pos. working **photoresist** material contg. alkali-sol. resin or acid-decomposable resin for manuf. of **color filter**)
IT 153698-54-5 153698-63-6 186493-32-3
(acid decompn. inhibitor; in pos. working **photoresist** material contg. alkali-sol. resin or acid-decomposable resin for manuf. of **color filter**)
IT 56530-39-3 66003-78-9 124737-97-9

(acid generator; in pos. working **photoresist** material contg. alkali-sol. resin or acid-decomposable resin for manuf. of **color filter**)

IT 101-80-4 484-47-9 1122-58-3

(in pos. working **photoresist** material contg. alkali-sol. resin or acid-decomposable resin for manuf. of **color filter**)

IT 24979-74-6, p-Hydroxystyrene-styrene copolymer 142952-62-3
180337-31-9 196709-91-8 223473-73-2

(pos. working **photoresist** material contg. alkali-sol. resin or acid-decomposable resin for manuf. of **color filter**)

L65 ANSWER 7 OF 15 HCA COPYRIGHT 2005 ACS on STN:

128:161006 Negative-working radiation-sensitive resin composition useful as **resist**. Iwanaga, Shinichiro; Ikesaki, Yoji; Ota, Yoshiji; Tanabe, Takaki (Japan Synthetic Rubber Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10010733 A2 19980116 Heisei, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-178670 19960620.

AB The title compn. comprises an alkali-sol. resin contg. .gtoreq.1 selected from hydroxystyrene-styrene copolymers and hydroxystyrene-.alpha.-methylstyrene copolymer in which the hydroxystyrene unit content is 70-95 mol%, a radiation-sensitive acid-generating agent, and a crosslinking agent. The compn. shows high **photosensitivity**, developability, and dimensional stability and provides high resoln. patterns with good profile. Thus, a **resist** comprised p-hydroxystyrene-styrene copolymer, tris(2,3-dibromopropyl) isocyanurate, and methoxymethylated urea resin.

IT 24979-73-5 24979-75-7

(radiation-sensitive **resist** compn. contg. hydroxystyrene-(methyl)styrene copolymer)

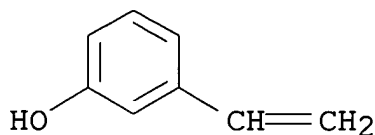
RN 24979-73-5 HCA

CN Phenol, 3-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 620-18-8

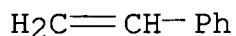
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



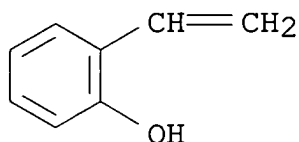
RN 24979-75-7 HCA

CN Phenol, 2-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 695-84-1

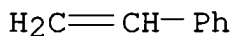
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



IC ICM G03F007-038

ICS G03F007-004; G03F007-033; H01L021-027

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

ST hydroxystyrene styrene copolymer radiation sensitive **resist** ; methylstyrene hydroxystyrene copolymer radiation sensitive **resist**

IT Aminoplasts

(radiation-sensitive **resist** compn. contg.

hydroxystyrene-(methyl)styrene copolymer)

IT **Resists**(radiation-sensitive, neg.-working; radiation-sensitive **resist** compn. contg. hydroxystyrene-(methyl)styrene copolymer)

IT 9003-08-1, Melamine resin 9011-05-6, Urea resin 24979-73-5
24979-74-6, p-Hydroxystyrene-styrene copolymer 24979-75-7
127523-21-1, p-Hydroxystyrene-.alpha.-methylstyrene copolymer
(radiation-sensitive **resist** compn. contg.
hydroxystyrene-(methyl)styrene copolymer)

L65 ANSWER 8 OF 15 HCA COPYRIGHT 2005 ACS on STN

128:121746 Negative-working radiation-sensitive resin composition useful
as chemical amplification-type **resist**. Iwanaga,
Shinichiro; Ikezaki, Yoji; Ota, Yoshihisa; Tanabe, Takayoshi (Japan
Synthetic Rubber Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP
09325495 A2 19971216 Heisei, 9 pp. (Japanese). CODEN:
JKXXAF. APPLICATION: JP 1996-165089 19960606.

AB The title compn. contains an alkali-sol. resin, a
radiation-sensitive acid-generating agent, and a compd.
R1O(R2O)nCH2NHCONHCH2(OR3)mOR4 [R1, R4 = H, C1-4 (halogenated)
alkyl which may be branched; R2, R3 = CH2, C2-4 alkylene, C2-4
alkylidene; n, m = 1-5] as a crosslinking agent. The compn. shows
improved developability and high **photosensitivity** and
provides high resolu. patterns with good profile and dimensional
stability.

IC ICM G03F007-038

ICS G03F007-004; H01L021-027

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)
Section cross-reference(s): 37

ST neg working radiation **resist** alkoxy urea

IT **Resists**

(neg.-working radiation-sensitive; radiation-sensitive
resist compn. contg. urea compd. crosslinking agent)

IT 201683-94-5P 201683-95-6P 201683-96-7P 201683-97-8P
(radiation-sensitive **resist** compn. contg. urea compd.
crosslinking agent)

IT 24979-70-2, Poly(p-vinylphenol) 24979-75-7,
Styrene-p-vinylphenol copolymer
(radiation-sensitive **resist** compn. contg. urea compd.
crosslinking agent)

L65 ANSWER 9 OF 15 HCA COPYRIGHT 2005 ACS on STN

127:301259 Method of forming positive **resist** pattern with
excellent shape retention. Yamamoto, Shigeki; Nogita, Tsuyuko
(Sumitomo Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP
09230608 A2 19970905 Heisei, 7 pp. (Japanese). CODEN:
JKXXAF. APPLICATION: JP 1996-609 19960108. PRIORITY: JP
1995-334556 19951222.

AB The process comprises the steps of: (1) coating a substrate with a
pos.-type **resist** compn. consisting of a solvent, a
quinonediazide compd., and a compd. contg. sulfonyl amide,

carboxylic amide, and/or ureido groups, in which any one of Hs is replaced by a group; (2) exposing through a **mask**; (3) developing to remove the exposed area, thereby forming a pos.-type pattern; and (4) hardening the pattern by heating. The quinonediazide compd. may be 1,2-naphthoquinonediazidesulfonyl ester. The process is used in manufg. semiconductor materials, printing plates, **color filters**, and the like.

The process provided the **resist** pattern having excellent properties such as solvent fastness, adhesivity with a substrate, etching resistance, and heat resistance.

- IC ICM G03F007-40
- ICS G03F007-022; G03F007-023; H01L021-027
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- Section cross-reference(s): 76
- ST pos **resist** pattern shape retention; printing plate pos **resist** pattern; semiconductor device pos **resist** pattern
- IT Printing plates
- Semiconductor devices
 - (method of forming pos. **resist** pattern with excellent shape retention)
- IT **Photoresists**
 - (prepn. of sulfonamide dye for formation of pos. **resist** pattern)
- IT **Dyes**
 - (sulfonamide deriv.; prepn. of sulfonamide dye for formation of pos. **resist** pattern)
- IT 1934-21-0D, reaction product with thionyl chloride and 3-(2-ethylhexyloxy)propylamine 6375-55-9D, reaction product with thionyl chloride and 3-(2-ethylhexyloxy)propylamine 7719-09-7D, Thionyl chloride, reaction product with (1) (shown in p. 5) and 3-(2-ethylhexyloxy)propylamine 22374-89-6D, reaction product with (1) (shown in p. 5) and thionyl chloride 197020-33-0D, reaction product with (1) (shown in p. 5) and thionyl chloride
 - (prepn. of sulfonamide dye for formation of pos. **resist** pattern)
- IT 3770-97-6DP, 1,2-Naphthoquinonediazide-5-sulfonylchloride, ester with 4-(1',2',3',4',4'a, 9'a-hexahydro-6'-hydroxy-5'methylspiro[cyclohexane-1,9'xanthene]-4'a-yl)-2-methylresolcinol 27029-76-1P, m-Cresol-p-cresol-formaldehyde copolymer 108388-54-1P 159339-70-5DP, ester with 1,2-naphthoquinonediazide-5-sulfonylchlorided
 - (prepn. of sulfonamide dye for formation of pos. **resist** pattern)
- IT 3770-97-6DP, 1,2-Naphthoquinonediazide-5-sulfonylchloride, ester with 4-(1',2',3',4',4'a, 9'a-hexahydro-6'-hydroxy-5'methylspiro[cyclohexane-1,9'xanthene]-4'a-yl)-2-methylresolcinol

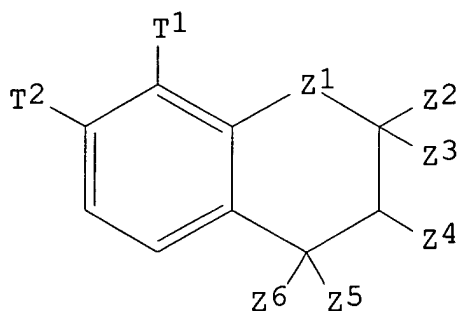
27029-76-1P, m-Cresol-p-cresol-formaldehyde copolymer 108388-54-1P
 159339-70-5DP, ester with 1,2-naphthoquinonediazide-5-sulfonylchlorided

(prepn. of sulfonamide dye for formation of pos. resist pattern)

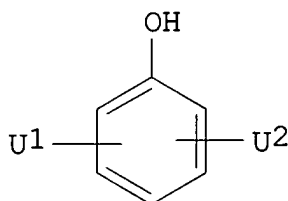
L65 ANSWER 10 OF 15 HCA COPYRIGHT 2005 ACS on STN

124:234022 Compositions for **color filters** and microlens arrays, and **color filters** and microlens arrays therefrom, manufacture thereof. Hishiro, Yoshiki; Yamamoto, Shigeki; Takeyama, Naomiki (Sumitomo Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 07306309 A2 19951121 Heisei, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-97748 19940511.

GI



I



II

AB The title compns. for **color color filters** for solid imaging devices with excellent color reprodn., color d. and heat resistance contain alkali-sol. resins prepd. from phenols I and II (Z1 = O, direct bond; Z2, Z3 = alkyl, hydroxyphenyl, excluding Z1 = Z2; Z4-6 = alkyl; T1, T2 = H, OH; U1, U2 = H, alkyl) in the presence of an acid catalyst. A compn. from hexakis(methoxymethyl)melamine 0.2, novolak [m-cresol, p-cresol, HCHO, and 2-(2,4-dihydroxyphenyl)-7-hydroxy-2,4,4-trimethyl-2H-benzopyran in 5:5:7.5:5 molar ratio, Mw 3000] 1, 2,6-bis(2,5-dimethyl-4-hydroxybenzyl)-4-methylphenol bis(o-naphthoquinonediazide-5-sulfonate) 0.8, and Et lactate 0.5 parts was used for patterning, exposed, and heated for flow and curing to form lenses with excellent heat resistance.

IT 24979-74-6, Maruka Lyncur CST-70

(compns. for **color filters** and microlens arrays, and **color filters** and microlens arrays therefrom, manuf. thereof)

RN 24979-74-6 HCA

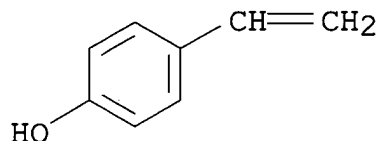
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI)

NAME)

CM 1

CRN 2628-17-3

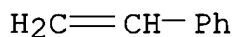
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



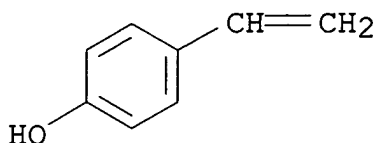
IC ICM G02B005-20
 ICS C08L061-06; G02B003-00; G03F007-004; G03F007-023; G03F007-26
 CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 74, 76
 ST heat resistant microlens array imaging; solid imaging device
color filter; phenolic resin microlens
color filter
 IT Heat-resistant materials
 Lenses
 Optical **filters**
 Optical imaging devices
 (compns. for **color filters** and microlens
 arrays, and **color filters** and microlens
 arrays therefrom, manuf. thereof)
 IT Phenolic resins, preparation
 (compns. for **color filters** and microlens
 arrays, and **color filters** and microlens
 arrays therefrom, manuf. thereof)
 IT 3584-23-4 154778-51-5 155643-84-8 160778-56-3 173692-95-0
 (compns. for **color filters** and microlens
 arrays, and **color filters** and microlens
 arrays therefrom, manuf. thereof)
 IT 108388-54-1P 173419-87-9P 173419-88-0P 173419-89-1P
 173419-90-4P 173419-91-5P 173419-93-7P
 (compns. for **color filters** and microlens
 arrays, and **color filters** and microlens

- arrays therefrom, manuf. thereof)
- IT 24979-74-6, Maruka Lyncur CST-70 25085-34-1, Acrylic acid-styrene copolymer
(compns. for **color filters** and microlens arrays, and **color filters** and microlens arrays therefrom, manuf. thereof)
- IT 6375-55-9, Suminol Milling Yellow MR 173419-92-6
(compns. for **color filters** and microlens arrays, and **color filters** and microlens arrays therefrom, manuf. thereof)
- IT 6375-55-9, Suminol Milling Yellow MR 173419-92-6
(compns. for **color filters** and microlens arrays, and **color filters** and microlens arrays therefrom, manuf. thereof)
- L65 ANSWER 11 OF 15 HCA COPYRIGHT 2005 ACS on STN 122:57472 **Photosensitive** novolak resin composition for **color filter**. Hishiro, Yoshiki; Takeyama, Naoki; Yamamoto, Shigeki (Sumitomo Chemical Co., Ltd., Japan). PCT Int. Appl. WO 9414892 A1 **19940707**, 39 pp. DESIGNATED STATES: W: JP, KR, US; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (Japanese). CODEN: PIXXD2. APPLICATION: WO 1993-JP1872 19931224. PRIORITY: JP 1992-344337 19921224; JP 1992-344336 19921224; JP 1993-17694 19930204; JP 1993-17693 19930204.
- AB The title compn., with good resoln., heat resistance (no change at 200.degree. for 40 min), and transparency, comprises a novolak resin contg. specific repeating units and having mol. wt. 1000-50,000 (e.g., copolymer of formaldehyde and reaction products of m-isopropenylphenol and BF3-di-Et ether complex in toluene), a solvent, and a dye or pigment (e.g., Oleosol Fast Blue RL).
- IT 24979-74-6, Maruka Lyncur CST 70
(**photosensitive** novolak resin compn. for **color filter**)
- RN 24979-74-6 HCA
- CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8

 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$

- IC ICM C08L061-06
ICS G03F007-023; G02B005-20
- CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 73
- ST **photosensitive novolak compn color filter**; resoln novolak compn **color filter**; heat resistance novolak **color filter**; transparency novolak compn **color filter**
- IT Dyes
Heat-resistant materials
Optical **filters**
Pigments
(**photosensitive novolak resin compn. for color filter**)
- IT Phenolic resins, uses
(novolak, **photosensitive novolak resin compn. for color filter**)
- IT 3584-23-4 20546-03-6 24979-71-3, Maruka Lyncur CMM
24979-74-6, Maruka Lyncur CST 70 159339-70-5
160170-91-2, Maruka Lyncur PHS-C 160171-00-6, Oleosol Fast Blue RL
(**photosensitive novolak resin compn. for color filter**)
- IT 108388-54-1 159949-28-7
(**photosensitive novolak resin compn. for color filter**)
- L65 ANSWER 12 OF 15 HCA COPYRIGHT 2005 ACS on STN
122:42778 **Resist** compositions for **color filters**. Hishiro, Yoshiki; Takeyama, Naomiki; Yamamoto, Shigeki (Sumitomo Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 06194835 A2 **19940715** Heisei, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-344338 19921224.
- AB The title **resist** compns. contain an alkali-sol. novolak resin, .gtoreq.1 alkali-sol. vinyl polymer, a solvent, and a dye. A **color filter** prep'd. from a **resist** compn. comprising m-cresol-p-cresol-HCHO novolak resin, Marukalyncur-CST-70 (vinylphenol resin), a quinonediazide comp'd., a crosslinking agent, Et lactate, and Oleosol Fast Blue RL (dye) had a high resoln.

pattern with good thermal resistance.

IT 24979-74-6, Marukalyncur CST 70
 (photoresists compns. contg. alkali-sol. novolak
 resins, polyvinyls, and dyes for color filters
)

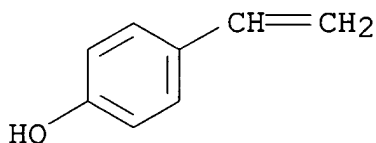
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
 NAME)

CM 1

CRN 2628-17-3

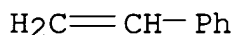
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



IC ICM G03F007-038
 ICS G03F007-004; G03F007-022; G03F007-039

ICA G02B005-20

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and
 Other Reprographic Processes)

ST color filter resist novolak resin;
 alkali sol polyvinyl dye resist

IT Crosslinking agents
 Optical filters
 (photoresists compns. contg. alkali-sol. novolak
 resins, polyvinyls, and dyes for color filters
)

IT Phenolic resins, uses
 (novolak, photoresists compns. contg. alkali-sol.
 novolak resins, polyvinyls, and dyes for color
 filters)

IT Resists
 (photo-, photoresists compns. contg. alkali-sol.
 novolak resins, polyvinyls, and dyes for color

filters)

IT 3584-23-4
(acid generator; **photoresists** compns. contg.
alkali-sol. novolak resins, polyvinyls, and dyes for
color filters)

IT 9003-08-1, Melamine resin
(crosslinking agents, hexamethoxymethylol group-contg.;
photoresists compns. contg. alkali-sol. novolak resins,
polyvinyls, and dyes for **color filters**)

IT 53252-02-1D, esters
(**photoresists** compns. contg. alkali-sol. novolak
resins, polyvinyls, and dyes for **color filters**
)

IT 12237-22-8, C.I. Solvent Black 27 24979-70-2 24979-71-3,
Marukalyncur CMM **24979-74-6**, Marukalyncur CST 70
27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer 59269-51-1,
Poly(vinylphenol)
(**photoresists** compns. contg. alkali-sol. novolak
resins, polyvinyls, and dyes for **color filters**
)

L65 ANSWER 13 OF 15 HCA COPYRIGHT 2005 ACS on STN
122:42777 **Resist**-compositions for **color**
filters. Hishiro, Yoshiki; Takeyama, Naomiki; Yamamoto,
Shigeki (Sumitomo Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo
Koho JP 06194828 A2 **19940715** Heisei, 7 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1992-344340 19921224.

AB The title **resist** compns. contain an acidic dye amine salt
or an acidic dye sulfonamide compd. as an org. solvent- and alk. aq.
soln.-sol. dye and an alkali-sol. vinyl polymer. A **color**
filter prepd. from a **resist** compn. comprising
Marukalyncur-M [poly(vinylphenol)], a sulfonamide deriv. (prepd.
from Cu phthalocyaninesulfonyl chloride and dodecylamine), and a
quinonediazide compd. had a stable colored pattern with high resoln.

IT **24979-74-6**, Marukalyncur CST 70
(**photoresists** compns. contg. alkali-sol. acidic dye
derivs. and and polyvinyls for **color filters**)

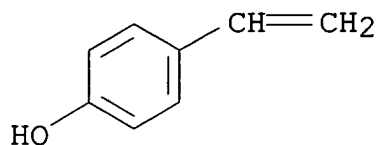
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3

CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8

 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$

- IC ICM G03F007-022
ICS C09B047-04; G03F007-004
- ICA G02B005-20
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST **color filter resist** acidic dye;
polyvinyl acidic dye **resist**
- IT Optical **filters**
(**photoresists** compns. contg. alkali-sol. acidic dye
derivs. and and polyvinyls for **color filters**)
- IT **Resists**
(photo-, **photoresists** compns. contg. alkali-sol. acidic
dye derivs. and and polyvinyls for **color
filters**)
- IT 24979-70-2, Poly(vinylphenyl)
(Marukalyncur M; **photoresists** compns. contg.
alkali-sol. acidic dye derivs. and and polyvinyls for
color filters)
- IT 9003-08-1, Melamine resin
(crosslinking agents, hexamethoxymethylol group-contg.;
photoresists compns. contg. alkali-sol. acidic dye
derivs. and and polyvinyls for **color filters**)
- IT 53252-02-1D, o-Naphthoquinone diazide 5-sulfonic acid, esters
(**photoresists** compns. contg. alkali-sol. acidic dye
derivs. and and polyvinyls for **color filters**)
- IT 124-22-1DP, Dodecylamine, reaction products with acidic dye
7617-78-9DP, 3-Decyloxypropylamine, reaction products with acidic
dye 27360-85-6DP, C.I. Acid Blue 249, reaction products with
amines
(**photoresists** compns. contg. alkali-sol. acidic dye
derivs. and and polyvinyls for **color filters**)
- IT **24979-74-6**, Marukalyncur CST 70 157480-50-7D, Aminol Fast

Brilliant Pink RL, reaction products with amine
(**photoresists** compns. contg. alkali-sol. acidic dye
derivs. and and polyvinyls for **color filters**)

L65 ANSWER 14 OF 15 HCA COPYRIGHT 2005 ACS on STN

122:42776 **Resist** compositions for **color**

filters. Hishiro, Yoshiki; Takeyama, Naomiki; Yamamoto,
Shigeki (Sumitomo Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo
Koho JP 06194827 A2 **19940715** Heisei, 7 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1992-344339 19921224.

AB The title **resist** compns. contain an alkali-sol. novolak
resin, .gtoreq.1 alkali-sol. vinyl polymer, a solvent, and a
pigment. A **color filter** prepd. from a
resist compn. comprising m-cresol-p-cresol-HCHO novolak
resin, Marukalyncur-CST-70 (vinyl polymer), a quinonediazide compd.,
hexamethoxymethylol group contg.-melamine resin, Et cellosolve
acetate, C.I. Pigment Blue 15, and C.I. Pigment Violet 23 had a high
resoln. pattern with good thermal resistance.

IT **24979-74-6**, Marukalyncur CST 70

(**photoresists** compns. contg. alkali-sol. novolak
resins, polyvinyls, and pigments for **color**
filters)

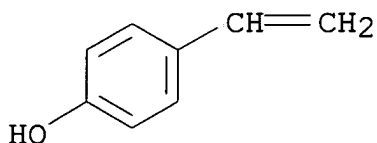
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3

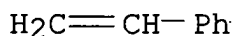
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



IC ICM G03F007-022

ICA G02B005-20

- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST **color filter resist** novolak resin;
alkali sol polyvinyl pigment **resist**
- IT Crosslinking agents
Optical **filters**
(**photoresists** compns. contg. alkali-sol. novolak resins, polyvinyls, and pigments for **color filters**)
- IT Phenolic resins, uses
(novolak, **photoresists** compns. contg. alkali-sol. novolak resins, polyvinyls, and pigments for **color filters**)
- IT **Resists**
(photo-, **photoresists** compns. contg. alkali-sol. novolak resins, polyvinyls, and pigments for **color filters**)
- IT 3584-23-4
(acid generator; **photoresists** compns. contg. alkali-sol. novolak resins, polyvinyls, and pigments for **color filters**)
- IT 9003-08-1, Melamine resin
(crosslinking agents, hexamethoxymethylol group-contg.; **photoresists** compns. contg. alkali-sol. novolak resins, polyvinyls, and pigments for **color filters**)
- IT 53252-02-1D, Naphthoquinone diazide 5-sulfonic acid, esters
(**photoresists** compns. contg. alkali-sol. novolak resins, polyvinyls, and pigments for **color filters**)
- IT 147-14-8, C.I. Pigment Blue 15 6358-30-1, C.I. Pigment Violet 23
24979-71-3, Marukalyncur CMM **24979-74-6**, Marukalyncur CST
70 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer
59269-51-1, Poly(vinylphenol) 160170-91-2, Maruka Lyncur PHS-C
(**photoresists** compns. contg. alkali-sol. novolak resins, polyvinyls, and pigments for **color filters**)
- L65 ANSWER 15 OF 15 HCA COPYRIGHT 2005 ACS on STN
117:140829 **Photosensitive** colored resin composition, colored image formation method of **color filter**, and formation method of black matrix. Kurata, Nobuyuki; Ishii, Keiji; Kikuchi, Hideo; Hayashi, Keiichi (Toyo Gosei Kogyo Co., Ltd., Japan). Eur. Pat. Appl. EP 483693 A2 **19920506**, 13 pp.
DESIGNATED STATES: R: DE, NL. (English). CODEN: EPXXDW.
APPLICATION: EP 1991-118267 19911025. PRIORITY: JP 1990-288504 19901029; JP 1990-303763 19901113; JP 1990-303764 19901113.
- AB A **photosensitive** colored resin compn. for the formation of colored images includes (a) a resin-based material hardenable with

an acid, (b) a **photoreactive** acid-releasing agent, and (c) a pigment. A colored image formation method of a **color filter** suitable for a liq.-crystal display panel includes (1) coating a **photosensitive** colored resin compn. on a transparent substrate and drying the coating to form a colored resin layer, (2) pattern exposing, (3) heating, and (4) developing the exposed and heated colored resin layer with an alk. developing soln. to form a colored image on the transparent substrate. The steps are repeated to form a multicolored image on the same substrate. A formation method of a black matrix for the formation of a **color filter** is also described.

IT 24979-74-6

(**photosensitive** compns. contg., for prodn. of optical filters)

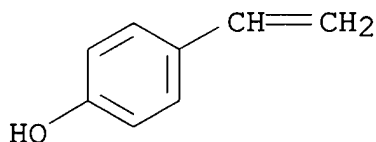
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

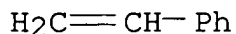
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



IC ICM G03F007-039

ICS G03C007-12; G03F007-022

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **color filter** liq crystal display; photoimaging compn optical **filter**

IT Optical **filters**

(**photosensitive** compns. for prodn. of)

IT Optical imaging devices

(electro-, liq.-crystal, **color filter** prodn.)

IT Phenolic resins, uses
(novolak, **photosensitive** compns. contg., for prodn. of
optical **filters**)

IT 1042-84-8 1675-54-3, Bisphenol A diglycidyl ether 3584-23-4
9003-08-1, Cymel 300 9016-83-5, Cresol-formaldehyde copolymer
24979-71-3 **24979-74-6** 59269-51-1, Polyvinylphenol
63226-13-1 66003-76-7 66810-89-7, Cymel 1123 69432-40-2
106870-13-7 115168-59-7
(**photosensitive** compns. contg., for prodn. of optical
filters)

=> d his 166-

FILE 'HCA' ENTERED AT 18:36:03 ON 10 FEB 2005

L66 76 S L6/D OR L6/DP
L67 81 S L34/D OR L34/DP
L68 13 S L47/D OR L47/DP
L69 39 S L64 NOT (L66 OR L67 OR L68)

=> d 169 1-39 cbib fhitr

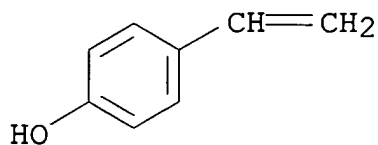
L69 ANSWER 1 OF 39 HCA COPYRIGHT 2005 ACS on STN
137:39321 Positively working **resist** composition containing
fluoropolymer for high resolution. Adegawa, Yutaka; Tan, Shiro;
Sorori, Tadahiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai
Tokkyo Koho JP 2002169295 A2 **20020614**, 124 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-272097 20010907.
PRIORITY: JP 2000-276896 20000912; JP 2000-283963 20000919.

IT **24979-74-6P**, p-Hydroxystyrene-styrene copolymer
(pos. working **resist** compn. contg. fluoropolymer for
high resoln.)

RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 2 OF 39 HCA COPYRIGHT 2005 ACS on STN
 136:348304 Positive **photosensitive** composition. Kodama,
 Kunihiro; Aoi, Toshiaki (Fuji Photo Film Co., Ltd., Japan). Eur.
 Pat. Appl. EP 1199603 A1 **20020424**, 148 pp. DESIGNATED
 STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
 MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR. (English). CODEN:
 EPXXDW. APPLICATION: EP 2001-124329 20011019. PRIORITY: JP
 2000-321128 20001020; JP 2000-352899 20001120; JP 2001-132546
 20010427.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer
 (photo-acid generator used in pos. **photoresist** compn.)

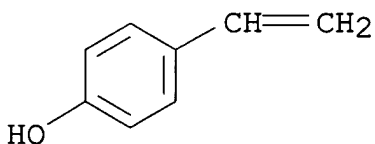
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
 NAME)

CM 1

CRN 2628-17-3

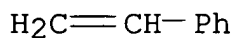
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 3 OF 39 HCA COPYRIGHT 2005 ACS on STN

135:378752 Chemically amplified negatively working radiation-sensitive resin composition. Kai, Toshiyuki; Ota, Yoshihisa; Ichinohe, Daigo (JSR Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001324811 A2 **20011122**, 22 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-142750 20000516.

IT **24979-74-6**, Styrene-p-vinylphenol copolymer
(chem. amplified neg. working radiation-sensitive resin compn.)

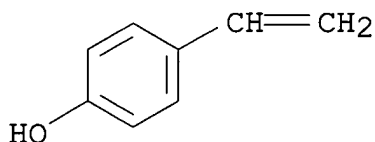
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

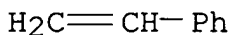
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 4 OF 39 HCA COPYRIGHT 2005 ACS on STN

135:68564 Negative radiation-sensitive chemically amplified resin composition. Kai, Toshiyuki; Wang, Yong; Kusumoto, Shirou; Ohta, Yoshihisa (Jsr Corp., Japan). Eur. Pat. Appl. EP 1111465 A1 **20010627**, 15 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 2000-128363 20001222. PRIORITY: JP 1999-367575 19991224.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer
(neg. radiation-sensitive chem. amplified resin compn.)

comprising)

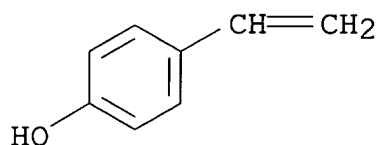
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

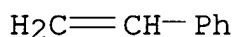
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 5 OF 39 HCA COPYRIGHT 2005 ACS on STN

134:23501 Sulfonic acid onium salt and radiation-sensitive resin composition using same. Wang, Isamu; Kobayashi, Eiichi (JSR Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000327654 A2 20001128, 34 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-135030 19990514.

L69 ANSWER 6 OF 39 HCA COPYRIGHT 2005 ACS on STN

133:274235 Radiation sensitive positive-working **resist** resin composition. Tan, Shiro; Aogo, Toshiaki; Fujiomori, Toru (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000258913 A2 20000922, 33 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-60286 19990308.

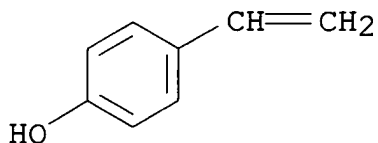
IT 24979-74-6P, p-Hydroxystyrene-styrene copolymer (polymer in radiation-sensitive pos.-working **resist** resin compn.)

RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

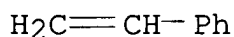
CM 1

CRN 2628-17-3
CMF C8 H8 O



CM 2

CRN 100-42-5
CMF C8 H8



L69 ANSWER 7 OF 39 HCA COPYRIGHT 2005 ACS on STN

131:80784 Positive-working **photoresist** composition containing two kinds of photoacid generator. Uenishi, Kazuya; Kodama, Kunihiro; Aogo, Toshiaki; Sato, Kenichiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11167199 A2 19990622 Heisei, 57 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-333145 19971203.

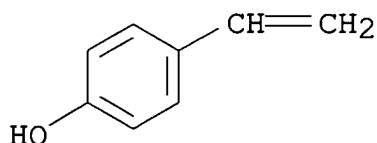
IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer (dissoln. inhibitor; **photoresist** compn. contg. alkali sol. resin and two kinds of photoacid generator)

RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

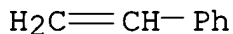
CRN 2628-17-3
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 8 OF 39 HCA COPYRIGHT 2005 ACS on STN

130:330572 Radiation-sensitive resin composition useful as chemically amplified **resist**. Ohta, Yoshihisa; Matsuda, Daiichi; Yumoto, Yoshitsugu (JSR Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11109613 A2 **19990423** Heisei, 21 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1997-281078 19970930.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer
(**resist** compn. contg. fullerene deriv.)

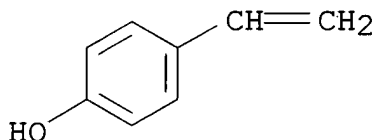
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

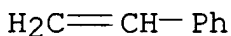
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 9 OF 39 HCA COPYRIGHT 2005 ACS on STN

130:175297 Radiation-sensitive resin compositions. Kobayashi, Eiichi; Shimizu, Makoto; Tanabe, Takayoshi; Iwanaga, Shin-ichiro (JSR Corporation, Japan). Eur. Pat. Appl. EP 898201 A1 **19990224**, 33 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English).
CODEN: EPXXDW. APPLICATION: EP 1998-115537 19980818. PRIORITY: JP 1997-235495 19970818.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer

(photoresists contg. photosensitive compns.
generating both carboxylic and non-carboxylic acids and)

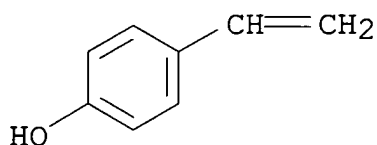
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

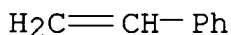
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 10 OF 39 HCA COPYRIGHT 2005 ACS on STN

129:101835 Novel deep UV **photoresist** based on thermal crosslinking and de-crosslinking of cross-linkable photoacid generator. Moon, Seong-Yon; Koo, Jae-Sun; Oh, Seung-Hun; Lee, Sang-Kyun; Kang, Shin-Ee (Polymer Mater. Lab., Chem. Sector, Advanced Inst. Technol., Taejon, 305-380, S. Korea). Journal of Photopolymer Science and Technology, 11(3), 439-444 (English) 1998. CODEN: JSTEEW. ISSN: 0914-9244. Publisher: Technical Association of Photopolymers, Japan.

IT **24979-74-6P**, p-Hydroxystyrene-styrene copolymer (novel deep UV **photoresist** based on thermal crosslinking and de-crosslinking of cross-linkable photoacid generator)

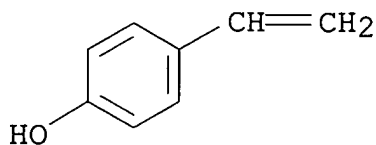
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

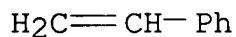
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 11 OF 39 HCA COPYRIGHT 2005 ACS on STN

128:237226 Positive-working **photosensitive** composition and preparation of phenolic compound or resin. Fujinomori, Susumu; Aogo, Toshiaki; Yamanaka, Tsukasa; Uenishi, Kazuya (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10062996 A2 19980306 Heisei, 48 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-217524 19960819.

IT 24979-74-6, p-Hydroxystyrene-styrene copolymer (photoresist compn. contg. phenolic compd. with acetal or ketal protective group)

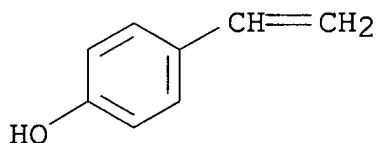
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

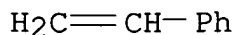
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 12 OF 39 HCA COPYRIGHT 2005 ACS on STN

128:161008 Positively working **photosensitive** composition with high sensitivity and resolving power. Sato, Kenichiro; Uenishi, Ichiya (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10010715 A2 **19980116** Heisei, 52 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-164696 19960625.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer (pos.-working **photoresist** contg. alkali-sol. resin and agent releasing sulfonic acid under activated light or radiation irradiation.)

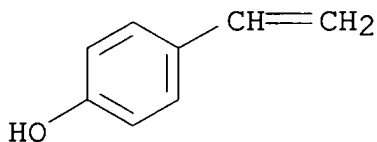
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

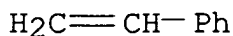
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 13 OF 39 HCA COPYRIGHT 2005 ACS on STN

128:28625 Positive-working **photosensitive** composition. Aoai, Toshiaki; Yamanaka, Tsukasa; Uenishi, Kazuya (Fuji Photo Film Co., Ltd., Japan). U.S. US 5683856 A **19971104**, 34 pp., Cont.-in-part of U.S. Ser. No. 525,157, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1996-634529 19960418. PRIORITY: JP 1994-252351 19941018; US 1995-525157 19950908.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer (pos.-working **photoresist** compns. for lithog. plate and

integrated circuit manuf. contg.)

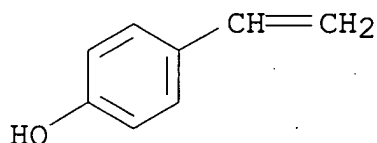
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

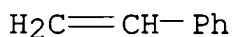
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 14 OF 39 HCA COPYRIGHT 2005 ACS on STN

127:339242 Positive **photosensitive** composition. Aoai, Toshiaki; Kodama, Kunihiro; Uenishi, Kazuya; Yamanaka, Tsukasa (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 795786 A2 **19970917**, 96 pp. DESIGNATED STATES: R: BE, DE, FR, GB. (English). CODEN: EPXXDW. APPLICATION: EP 1997-103978 19970310. PRIORITY: JP 1996-53316 19960311; JP 1996-138918 19960531; JP 1996-167976 19960627; JP 1997-27111 19970210.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer (pos. chem.-amplification **photoresists** contg. arylsulfonium arylsulfonate photoacid generators and)

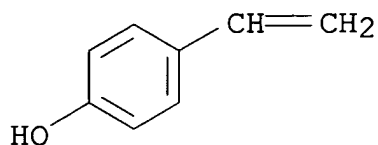
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

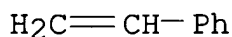
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 15 OF 39 HCA COPYRIGHT 2005 ACS on STN

127:212529 Chemically-amplified positive-working **photoresist** composition with high resolution. Aogo, Toshiaki; Fujimori, Toru; Yamanaka, Tsukasa; Uenishi, Kazuya (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09197661 A2 **19970731** Heisei, 67 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-9582 19960123.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer (alkali-sol.; chem.-amplified pos.-working **photoresist** with high resoln. and transparency to deep UV light)

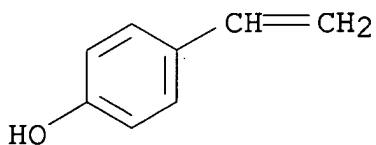
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

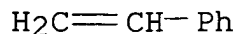
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8

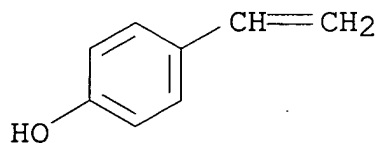


L69 ANSWER 16 OF 39 HCA COPYRIGHT 2005 ACS on STN
127:154652 Negative-working radiation-sensitive **resist**
composition. Ikezaki, Yoji; Yamachika, Mikio; Ota, Toshiyuki;
Tsuji, Akira (Japan Synthetic Rubber Co., Ltd., Japan). Jpn. Kokai
Tokkyo Koho JP 09166870 A2 **19970624** Heisei, 14 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-347019 19951214.
IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer
(neg.-working radiation-sensitive **resist** compn.)
RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3

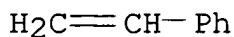
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8

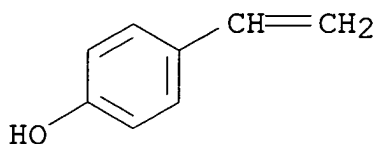


L69 ANSWER 17 OF 39 HCA COPYRIGHT 2005 ACS on STN
127:115294 **Resist** coating solution, its preparation, and
negative-working **resist** composition using it. Ishikawa,
Kiyoshi; Omori, Katsumi; Sato, Mitsuru; Iguchi, Etsuko; Kaneko,
Fumitake; Nakayama, Toshimasa (Tokyo Ohka Kogyo Co., Ltd., Japan).
Jpn. Kokai Tokkyo Koho JP 09138503 A2 **19970527** Heisei, 7
pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-295571
19951114.
IT **24979-74-6**, VPS 2515
(neg.-working **resist** compn. contg. amine and
hydroxy-contg. resin)

RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

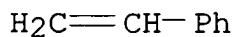
CM 1

CRN 2628-17-3
CMF C8 H8 O



CM 2

CRN 100-42-5
CMF C8 H8



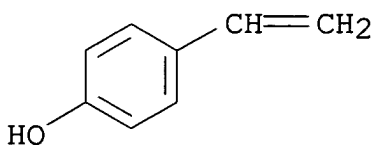
L69 ANSWER 18 OF 39 HCA COPYRIGHT 2005 ACS on STN
125:342917 Positively working **photosensitive** resin composition
containing acid-decomposable dissolution inhibitor. Yamanaka,
Tsukasa; Aoso, Toshiaki (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai
Tokkyo Koho JP 08220762 A2 **19960830** Heisei, 49 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-25531 19950214.

IT **24979-74-6**, Maruka Lyncur CST 70
(pos. working **photosensitive** resin compn. contg.
acid-decomposable dissoln. inhibitor)

RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

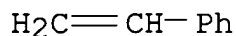
CRN 2628-17-3
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 19 OF 39 HCA COPYRIGHT 2005 ACS on STN
125:342905 Positive- and negative-working radiation-sensitive resin
compositions. Oota, Yoshihisa; Natsui, Tooru; Makita, Minoru;
Yamachika, Mikio (Japan Synthetic Rubber Co Ltd, Japan). Jpn. Kokai
Tokkyo Koho JP 08211598 A2 19960820 Heisei, 21 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-39420 19950206.

IT 24979-74-6, p-Hydroxystyrene-styrene copolymer
(radiation-sensitive **resist** compn. contg.
thiosulfonate)

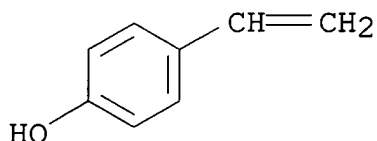
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3

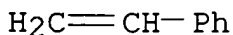
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 20 OF 39 HCA COPYRIGHT 2005 ACS on STN
125:342878 Radiation-sensitive composition containing plasticizer.
Padmanaban, Munirathna; Kinoshita, Yoshiaki; Okazaki, Hiroshi;

Masuda, Seiya; Kawasaki, Natsumi; Funato, Satoru; Pawlowski, Georg (Hoechst Industry Limited, Japan). Eur. Pat. Appl. EP 735422 A1 **19961002**, 14 pp. DESIGNATED STATES: R: DE, FR, GB. (English). CODEN: EPXXDW. APPLICATION: EP 1996-103906 19960312. PRIORITY: JP 1995-94299 19950328.

IT **24979-74-6**, 4-Hydroxystyrene-styrene copolymer
(radiation-sensitive compns. for lithog. contg. plasticizers and polyacetals and)

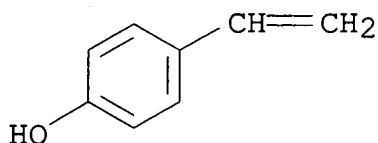
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA-INDEX NAME)

CM 1

CRN 2628-17-3

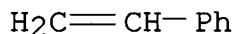
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 21 OF 39 HCA COPYRIGHT 2005 ACS on STN

125:45129 Radiation-sensitive composition. Padmanaban, Munirathna; Suehiro, Natsumi; Kinoshita, Yoshiaki; Funato, Satoru; Masuda, Seiya; Okazaki, Hiroshi; Pawlowski, Georg (Hoechst Japan Limited, Japan). Eur. Pat. Appl. EP 710885 A1 **19960508**, 17 pp. DESIGNATED STATES: R: DE, FR, GB. (English). CODEN: EPXXDW. APPLICATION: EP 1995-117268 19951102. PRIORITY: JP 1994-269579 19941102.

IT **24979-74-6**, 4-Hydroxystyrene-styrene copolymer
(chem. amplified **photoresists** contg. phenolic or polyphenolic compds. and)

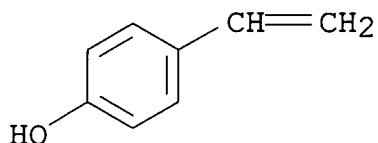
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

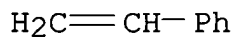
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 22 OF 39 HCA COPYRIGHT 2005 ACS on STN

125:45127 Positive chemically amplified **resist** composition and method for producing compounds used therein. Aoi, Toshiaki; Fujimori, Toru (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 709736 A1 **19960501**, 78 pp. DESIGNATED STATES: R: BE, DE. (English). CODEN: EPXXDW. APPLICATION: EP 1995-116815 19951025. PRIORITY: JP 1994-262790 19941026.

IT **24979-74-6**, 4-Hydroxystyrene-styrene copolymer
(reaction in prepg. acid-decomposable dissoln. inhibitor for pos **photoresist**)

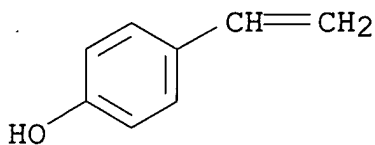
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

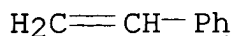
CRN 2628-17-3

CMF C8 H8 O



CM 2

CRN 100-42-5
CMF C8 H8



L69 ANSWER 23 OF 39 HCA COPYRIGHT 2005 ACS on STN
125:45124 Positive-working **photosensitive** composition. Aoi,
Toshiaki; Yamanaka, Tsukasa; Uenishi, Kazuya (Fuji Photo Film Co.,
Ltd., Japan). Eur. Pat. Appl. EP 708368 A1 **19960424**, 78
pp. DESIGNATED STATES: R: BE, DE. (English). CODEN: EPXXDW.
APPLICATION: EP 1995-114054 19950907. PRIORITY: JP 1994-252351
19941018.

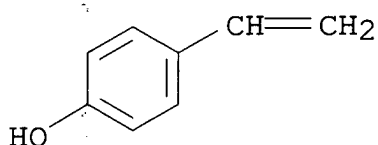
IT **24979-74-6**, Styrene-p-hydroxystyrene copolymer
(lithog. plate manuf. and **resist** pattern formation
using pos.-working **photosensitive** compns. contg.)

RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

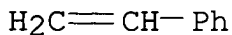
CM 1

CRN 2628-17-3
CMF C8 H8 O



CM 2

CRN 100-42-5
CMF C8 H8



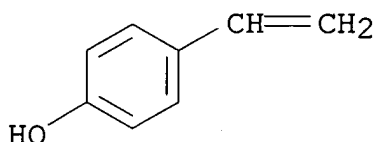
L69 ANSWER 24 OF 39 HCA COPYRIGHT 2005 ACS on STN
124:131535 Chemical amplification-type **resist** composition.
Nakano, Yoshiko; Takeyama, Naomoto; Ueda, Juji; Kusumoto, Takehiro;
Ueki, Hiromi (Sumitomo Chemical Co., Ltd., Japan). Jpn. Kokai
Tokkyo Koho JP 07244378 A2 **19950919** Heisei, 6 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-34836 19940304.
IT 24979-74-6, Maruka Lyncur CST 70
(chem. amplification-type **resist** contg. hydroxyimide
sulfonate as **photosensitive** acid generator)
RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3

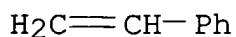
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



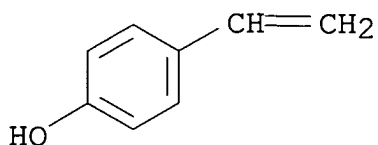
L69 ANSWER 25 OF 39 HCA COPYRIGHT 2005 ACS on STN
124:101862 Antireflection substrate material for underlayer of
photosensitive resin. Takeyama, Naomiki; Kusumoto,
Takehiro; Yamamoto, Shigeki; Oka, Hiromi; Nakano, Yoshiko (Sumitomo
Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 07247401 A2
19950926 Heisei, 7 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1994-41022 19940311.

IT 24979-74-6, Maruka Lyncur CST 70
(**resist** component; antireflection substrate material
for underlayer of **photosensitive** resin)
RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3

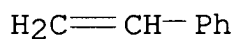
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8

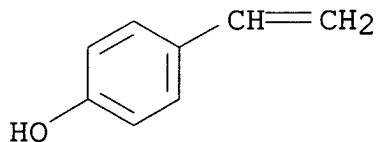


L69 ANSWER 26 OF 39 HCA COPYRIGHT 2005 ACS on STN
 124:71616 Negative-working radiation-sensitive **resist**
 composition and fine pattern formation using it. Kataoka, Mutsuo;
 Asano, Masaya (Toray Industries, Japan). Jpn. Kokai Tokkyo Koho JP
 07219227 A2 **19950818** Heisei, 10 pp. (Japanese). CODEN:
 JKXXAF. APPLICATION: JP 1994-13458 19940207.
 IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer
 (CST 50; neg.-working **resist** compn. contg. alkali-sol.
 resin and quinonediazide compd.)
 RN 24979-74-6 HCA
 CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
 NAME)

CM 1

CRN 2628-17-3

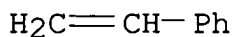
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 27 OF 39 HCA COPYRIGHT 2005 ACS on STN

122:20516 **Photopolymerizing** compositions useful as **photoresists**. Ikeda, Tomoyuki; Inasawa, Kenji; Goto, Yoshitaka (Nippon Oils & Fats Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 06202326 A2 **19940722** Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-348642 19921228.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer (photoresist compn. contg. maleic anhydride-styrene copolymer and hydroxystyrene copolymer)

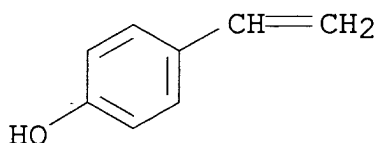
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 28 OF 39 HCA COPYRIGHT 2005 ACS on STN

122:20514 **Photopolymerizing** compositions useful as **photoresists**. Ikeda, Tomoyuki; Inasawa, Kenji; Goto, Yoshitaka (Nippon Oils & Fats Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 06202322 A2 **19940722** Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-348644 19921228.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer (photoresist compn. contg. hydroxystyrene copolymer and acrylate crosslinking agent)

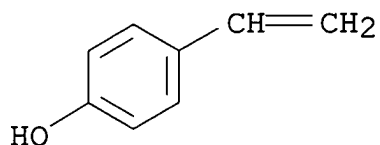
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

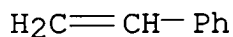
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 29 OF 39 HCA COPYRIGHT 2005 ACS on STN

121:289694 **Photopolymerizing** compositions useful for

photoresists. Ikeda, Tomoyuki; Inasawa, Kenji; Goto, Yoshitaka (Nippon Oils & Fats Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 06202327 A2 **19940722** Heisei, 6 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 1992-348643 19921228.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer

(**photoresist** compn. contg. hydroxystyrene copolymer and acrylate crosslinking agent and **photopolymn.** initiator)

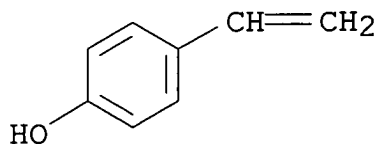
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

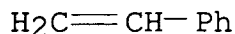
CRN 2628-17-3

CMF C8 H8 O



CM 2

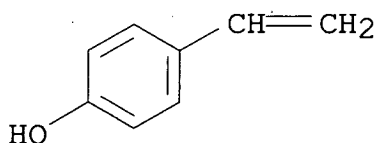
CRN 100-42-5
CMF C8 H8



L69 ANSWER 30 OF 39 HCA COPYRIGHT 2005 ACS on STN
121:96051 Negative-working **photoresists** compositions useful
for making semiconductor circuits. Kitaori, Tomoyuki; Koyanagi,
Takao; Fukunaga, Masanori (Nippon Kayaku Kk, Japan). Jpn. Kokai
Tokkyo Koho JP 06035194 A2 **19940210** Heisei, 5 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-213264 19920720.
IT **24979-74-6**, Maruka Lyncur CST 70
(**photoresist** from)
RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

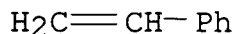
CM 1

CRN 2628-17-3
CMF C8 H8 O



CM 2

CRN 100-42-5
CMF C8 H8



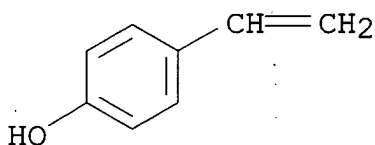
L69 ANSWER 31 OF 39 HCA COPYRIGHT 2005 ACS on STN
120:334985 Negative-working **photoresist** compositions with high
photosensitivity. Tochisawa, Tetsuaki; Kunyoshi, Yasuo;
Matsumura, Masako; Kikuchi, Hideo (Toyo Gosei Kogyo Kk, Japan).
Jpn. Kokai Tokkyo Koho JP 05341507 A2 **19931224** Heisei, 12
pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-153383
19920612.

IT 24979-74-6, p-Hydroxystyrene-styrene copolymer
(reaction of, with azidechalkonesulfonyl chloride)
RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3

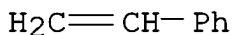
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 32 OF 39 HCA COPYRIGHT 2005 ACS on STN
120:120769 Process for purifying vinylphenol polymers for use as
photoresist materials. Matsumoto, Tadashi; Akaho, Mitsuru
(Maruzen Petrochemical Co., Ltd., Japan). Eur. Pat. Appl. EP 544325
A1 **19930602**, 11 pp. DESIGNATED STATES: R: CH, DE, FR,
GB, LI, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1992-120311
19921127. PRIORITY: JP 1991-339728 19911128.

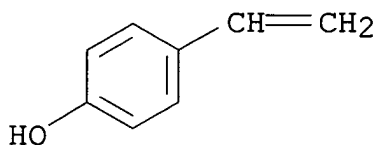
L69 ANSWER 33 OF 39 HCA COPYRIGHT 2005 ACS on STN
119:128428 Radiation-sensitive compositions useful as **resists**.
Murata, Makoto; Oota, Toshuki; Isamoto, Yoshitsugu; Miura, Takao
(Japan Synthetic Rubber Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP
05066563 A2 **19930319** Heisei, 14 pp. (Japanese). CODEN:
JKXXAF. APPLICATION: JP 1991-252788 19910905.

IT **24979-74-6P**, p-Hydroxystyrene-styrene copolymer
(prepn. and reaction of, with succinic anhydride and
dihydropyran)
RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3

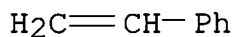
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 34 OF 39 HCA COPYRIGHT 2005 ACS on STN

119:128416 Negative-working radiation-sensitive composition and radiation-sensitive recording material produced therewith.

Pawlowski, Georg; Dammel, Ralph; Roeschert, Horst; Meier, Winfried; Spiess, Walter; Przybilla, Klaus Juergen (Hoechst A.-G., Germany).

Eur. Pat. Appl. EP 525625 A1 **19930203**, 16 pp. DESIGNATED

STATES: R: BE, CH, DE, FR, GB, IT, LI. (German). CODEN: EPXXDW.

APPLICATION: EP 1992-112559 19920722. PRIORITY: DE 1991-4125042 19910729.

IT **24979-74-6**, 4-Hydroxystyrene-styrene copolymer
(neg.-working **photosensitive** compn. cong)

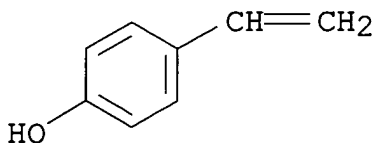
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

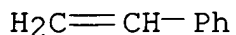
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 35 OF 39 HCA COPYRIGHT 2005 ACS on STN
114:153929 **Photopolymerizable** compositions and recording
materials containing them. Schneller, Arnold; Emmelius, Michael
(Hoechst A.-G., Germany). Ger. Offen. DE 3839366 A1
19900523, 9 pp. (German). CODEN: GWXXBX. APPLICATION: DE
1988-3839366 19881122.

IT **24979-74-6**, p-Hydroxystyrene-styrene copolymer
(as binder in **photopolymerizable** compn.)

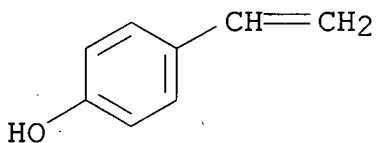
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3

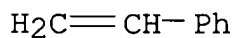
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



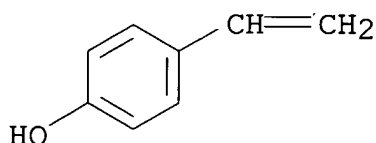
L69 ANSWER 36 OF 39 HCA COPYRIGHT 2005 ACS on STN
113:106450 Heat-resistant **photoresist** composition for far
ultraviolet or excimer laser beam. Totoko, Masaaki; Yamamoto,
Takashi; Nagaoka, Keiko; Kyota, Toru (Tosoh Corp., Japan). Jpn.
Kokai Tokkyo Koho JP 02015270 A2 **19900118** Heisei, 7 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-165127 19880704.

IT 24979-74-6, p-Hydroxystyrene-styrene copolymer
(photoresist from, for use with UV or excimer laser,
heat-resistant)
RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3

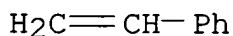
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



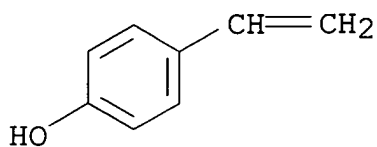
L69 ANSWER 37 OF 39 HCA COPYRIGHT 2005 ACS on STN
112:207982 **Photoresist** compositions. Todoko, Masaaki; Kyota,
Toru; Yamamoto, Takashi; Nagaoka, Tsuneko (Tosoh Corp., Japan).
Jpn. Kokai Tokkyo Koho JP 01293339 A2 19891127 Heisei, 8
pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-123929
19880523.

IT 24979-74-6, p-Hydroxystyrene-styrene copolymer
(photoresists contg., for deep-UV,
crosslinking agents for)
RN 24979-74-6 HCA
CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX
NAME)

CM 1

CRN 2628-17-3

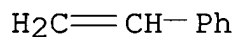
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 38 OF 39 HCA COPYRIGHT 2005 ACS on STN

104:43202 Radiation-sensitive mixture from acid-cleavable compounds.

Schneller, Arnold; Herwig, Walter; Erbes, Kurt (Hoechst A.-G., Fed. Rep. Ger.). Ger. Offen. DE 3406927 A1 **19850829**, 28 pp.

(German). CODEN: GWXXBX. APPLICATION: DE 1984-3406927 19840225.

IT **24979-74-6**

(photoresist compn. contg. acid-cleavable compd. and)

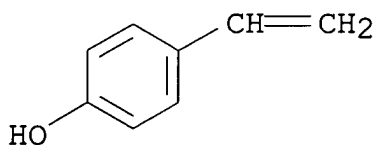
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

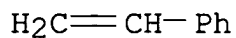
CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8



L69 ANSWER 39 OF 39 HCA COPYRIGHT 2005 ACS on STN

92:164689 **Photosensitive** polymers. Yamaguchi, Hiroyoshi;

Iwaki, Akio; Kita, Noriyasu; Sasazawa, Tatsuya (Konishiroku Photo Industry Co., Ltd., Japan). Brit. UK Pat. Appl. GB 2018779

19791024, 14 pp. (English). CODEN: BAXXDU. APPLICATION:

GB 1979-12930 19790412.

IT **24979-74-6P**

(manuf. and esterification of, by azidocinnamylidenecyanoacetic acid chloride)

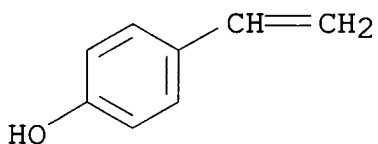
RN 24979-74-6 HCA

CN Phenol, 4-ethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

CMF C8 H8 O



CM 2

CRN 100-42-5

CMF C8 H8

